### Before the FEDERAL COMMUNICATIONS COMMISSION Washington, DC 20554

RECE	IVED
ADD 1	8 2001

	Mint of
	CHIEFE OF THE SECRETARY
MM Docket No. 01-	
RM-	

To: Chief, Video Services Division

#### PETITION FOR RULEMAKING

TV Alabama, Inc. ("TV Alabama"), licensee of television station WJSU-TV NTSC Channel 40, Anniston, Alabama, by its undersigned attorneys and pursuant to Sections 1.401 and 73.623 of the Federal Communications Commission's rules, hereby petitions for rulemaking to amend the Digital Television ("DTV") Table of Allotments, 47 C.F.R. § 73.622(b). Specifically, TV Alabama requests that the Commission substitute Channel 9 for Channel 58 as the DTV channel assigned to WJSU-DT. Under this proposal, the DTV Table of Allotments would be amended as follows:

Community	Present	Proposed
Anniston, Alabama	58	9

For the reasons set forth below, and as demonstrated by the attached Engineering Statement of Cavell, Mertz & Davis, Inc. ("Engineering Statement"), TV Alabama submits that the proposed amendment to the DTV Table of Allotments is consistent with the Commission's rules and is in the public interest.

No. of Copies rec'd Of 4

List A B C D E MMB

01.26

- channel substitution is fully consistent with the requirements of Section 73.623(c)(1).

  Specifically, the operation of WJSU-DT on Channel 9 satisfies the Commission's 2%-10% *de minimis* interference test. No analog or DTV station will receive incremental interference exceeding two percent of the population currently served. In addition, the proposed channel change will not result in any new interference to stations already experiencing maximum DTV interference (i.e., interference in excess of ten percent of their current NTSC population), nor will it result in interference that would cause another station to begin experiencing DTV interference to greater than ten percent of the population currently served. Moreover, to the extent such protection is required, there will be no impermissible interference to protected Class A television stations.<sup>1</sup>
- 2. DTV Channel 9 can be allotted to WJSU using the station's authorized NTSC transmitter site in full compliance with the principal community coverage requirements of Section 73.625(a).
- 3. The proposed channel substitution would benefit the public interest for several reasons. First, implementing WJSU's DTV operation on an "in core channel" would eliminate the need to change DTV channels yet again at the end of the transition period. TV Alabama would be able to complete the build-out of its DTV facilities earlier and at less cost, resulting in improved service to the public. The proposed change will also eliminate the

<sup>&</sup>lt;sup>1</sup> TV Alabama does not concede that it is necessary to protect Class A television stations from additional interference in a petition for a DTV channel change. TV Alabama submits the DTV channel change requested here – substituting a core DTV channel for a non-core channel – represents an appropriate solution to a technical problem that ensures the long-term replication and maximization of WJSU's NTSC service area. Accordingly, TV Alabama submits that no Class A protection is required under the Community Broadcasters' Protection Act of 1999. See 47 U.S.C. § 336(f)(1)(D) (2000).

potential to confuse or frustrate the public by requiring them to find WJSU-DT on a second channel.

- 4. Second, operation on DTV Channel 9 as opposed to DTV Channel 58 would improve signal coverage for viewers in the Anniston DMA. Presently, WJSU-TV operates on NTSC Channel 40. As demonstrated in the Engineering Statement, operation of WJSU utilizing proposed DTV Channel 9 would achieve a twelve percent increase in interference-free population over that of the current NTSC facility's licensed Grade B contour. TV Alabama submits that the public interest would be served by the more efficient use of the broadcast spectrum.
- 5. Third, TV Alabama submits that its proposal to vacate an out-of-core DTV channel is itself in the public interest. As evidenced by the current public policy debate over the appropriate steps the Commission should take to clear channels 60-69, the process of clearing incumbents from reallocated spectrum is exceedingly difficult. The instant proposal serves to make the next round of broadcast spectrum reallocation easier for the Commission.

  Accordingly, TV Alabama submits that this fact alone warrants a finding that the proposed channel change request is in the public interest.

#### **CONCLUSION**

For the foregoing reasons, TV Alabama respectfully requests that the Commission initiate the rulemaking requested herein to substitute DTV Channel 9 for DTV Channel 58 as the digital television channel assigned to TV Alabama, Inc., Anniston, Alabama.

Respectfully submitted,

TV Alabama, Inc.

By: Thomas P. Van Wazer

Thomas P. Van Wazer

Jennifer Tatel\*

Its Attorneys

SIDLEY & AUSTIN 1722 Eye Street, N.W. Washington, DC 20006

202-736-8000

Dated: April 18, 2001

\* Admitted only in Virginia

**Engineering Statement** 

prepared for

TV Alabama, Inc.

WJSU-DT Anniston, Alabama

Ch. 9 19 kW (MAX-DA) 359 m

This engineering statement has been prepared on behalf of TV Alabama, Inc. ("TV

Alabama"), licensee of WJSU-TV, NTSC Channel 40, Anniston, Alabama. In the Commission's

Second Memorandum Opinion and Order on Reconsideration of the Fifth and Sixth Report and

Orders on Advanced Television ("SMO&O"), DTV Channel 58 was allotted as a "paired" DTV

Channel for WJSU-TV. The instant statement supports a *Petition for Rulemaking* on behalf of TV

Alabama, to propose a substitute channel for WJSU-DT. DTV Channel 9 is sought as that substitute

channel.

**Discussion** 

An engineering review of the DTV allotments and NTSC assignments in the region

surrounding Anniston showed that an alternate channel could be used for the Channel 58 DTV

allotment. Detailed interference studies were conducted with respect to domestic NTSC and DTV

allotments and facilities, in accordance with §73.623(c) (as required in the SMO&O). Consideration

was also given to Low Power Television (LPTV) stations that are listed as eligible for Class A status.

The studies showed that DTV Channel 9 could be used for WJSU-DT at 19 kW maximum effective

radiated power (ERP) and an antenna height above average terrain (HAAT) of 359 meters. This

facility will provide interference-free service to 1,338,528 people, which is 12% greater than the

1,194,916 people served by the current WJSU-TV NTSC facility.

The technical data for the proposed Channel 9 allotment are summarized on the following

page. The site specified is the same as that for the WJSU-DT pending application. The power and

height combination is specified as shown (for the proposed "reference" point) as a basis to avoid

interference to NTSC and DTV stations and Low Power Television (LPTV) stations eligible for

Class A status.

<sup>1</sup> See MM Docket 87-268, Advanced Television Systems and Their Impact upon the Existing Television Broadcast Service, FCC 98-315, released December 18, 1998.

Cavell, Mertz & Davis, Inc.

### **Engineering Statement**

(page 2 of 4)

#### **Summary Technical Data for Proposed DTV Channel 9**

Coordinates (NAD-27)

33° 36' 24" N-Lat

86° 25' 03" W-Lon

Channel

9

Effective Radiated Power

19 kW (MAX-DA)

(See Table 1 for directional antenna

relative field azimuth pattern)

Antenna Height

579 m AMSL 359 m HAAT

#### **NTSC and DTV Allocation Considerations**

Criteria for evaluating the impact of DTV station proposals were released in the Commission's August 10, 1998 Public Notice entitled "Additional Application Processing Guidelines for Digital Television." In that Public Notice, the Commission's Mass Media Bureau stated that "interference to [NTSC stations and DTV stations and allotments] affecting less than 2 percent of the population they serve is considered to be de minimis. However, any interference is considered unacceptable (there is no amount considered to be de minimis) if the station to be protected already is receiving interference to more than 10 percent of the population it would otherwise serve...." The same Public Notice states that for DTV proposals, the determination of interference to NTSC and DTV facilities (as calculated per OET Bulletin 69) will be rounded to the nearest tenth of a percent. The August 10, 1998 Public Notice regarding the channel change proposed herein requires that interference criteria (as described above and in §73.623(c)) be utilized to evaluate the new channel facility's impact on NTSC and DTV.

Accordingly, a study was conducted to evaluate the change in interference to pertinent NTSC and DTV assignments that may be attributed to the proposed Channel 9 facility. A detailed interference study was conducted in accordance with the terrain dependent Longley-Rice point-to-point propagation model, per the Commission's Office of Engineering and Technology Bulletin number 69, Longley-Rice Methodology for Evaluating TV Coverage and Interference, July 2, 1997

### **Engineering Statement**

(page 3 of 4)

("OET-69").<sup>2</sup> The interference study examined the net change in interference as experienced by DTV stations that would result from the proposal.

All stations considered in this study are listed in **Table 2**. As shown in **Table 2**, any increase in interference to NTSC and DTV facilities complies with the Commission's 2%/10% "de minimis" guidelines. No interference is predicted to any other NTSC or DTV station or allotment. Thus, this proposal is believed to be in compliance with Commission policy regarding DTV channel changes as they may affect NTSC and DTV stations. Accordingly, based on the results of this study, it is believed that there will be no impact to NTSC and DTV assignments as a result of the instant proposal.

#### **Class A Television**

An allocation study of possible conflicts was conducted with respect to LPTV / translator stations that may be eligible for Class A status.<sup>3</sup> The study determined that no LPTV / translator stations are close enough to the proposed DTV Channel 9 allotment facility to warrant detailed review. Contour overlap is not caused and interference is not received from any LPTV station, including stations that are eligible for a Class A license. Therefore, there will be no impact to Class A Television stations as a result of the instant proposal.

<sup>&</sup>lt;sup>2</sup>The implementation of OET-69 for this study followed the guidelines of OET-69 as specified therein. A standard terrain profile step size of 1 km and cell size of 2 km were used. The Longley-Rice computer program input data, following the guidelines established under OET-69, includes a location variability of 50%, a time availability of 10%, a situation variability of 50%, horizontal polarization, 0.005 S/m conductivity, a climate constant of 15, an assumption of a continental temperate climate zone, and a receive antenna height of 10 meters. The service area for each DTV facility under study is that area predicted to receive signal levels of at least 36 dBμ using the Longley-Rice methodology, and within the DTV F(50,90) 36 dBμ contour. In instances where the DTV reference ERP is 3.2 kW, the Grade B contour of the associated analog station (authorized as of April 3, 1997) is used to determine the extent of the DTV station's service area per §73.622(e)(1). The service area for each NTSC facility under study is that area predicted to receive signal levels of at least 56 dBμ using the Longley-Rice methodology, and within the NTSC F(50,50) 56 dBμ contour. Comparisons of various results of this computer program to the Commission's implementation of OET-69 show good correlation.

<sup>&</sup>lt;sup>3</sup>The Commission recently created a new class of television stations. See *Establishment of a Class A Television Service*, MM Docket 00-10, FCC 00-115, released April 4, 2000.

Engineering Statement (page 4 of 4)

**Summary** 

It is proposed that DTV Channel 9 be allotted to Anniston, Alabama as a substitute for

Channel 58. The substitution will not impact any NTSC or DTV facility. There is no conflict with

LPTV stations eligible for Class A status.

Certification

Under the penalty of perjury, the undersigned hereby certifies that the foregoing statement

was prepared by him or under his direction, and that it is true and correct to the best of his

knowledge and belief. Mr. Schultz is an associate in the firm of Cavell, Mertz & Davis, Inc., holds

a Bachelor of Science degree from the University of Rochester in Physics, and has previously

submitted engineering exhibits to the Federal Communications Commission. His qualifications are

a matter of record with that entity.

Jonathan A. Schulz

April 17, 2001

Cavell, Mertz & Davis, Inc. 10300 Eaton Place Suite 200 Fairfax, VA 22030

(703) 591-0110

# Table 1 DIRECTIONAL ANTENNA RELATIVE FIELD PATTERN

prepared for

# TV Alabama, Inc.

WJSU-DT Anniston, Alabama Ch. 9 19 kW (MAX-DA) 359 m

Azimuth		Relative	Azimuth		Relative
$(\mathbf{T}^{\circ})$		<u>Field</u>	<u>(T°)</u>		<u>Field</u>
0		0.528	180		0.755
10		0.506	190		0.817
16	minimum	0.503	200		0.872
20		0.505	210		0.918
30		0.519	220		0.954
40		0.542	230		0.980
50		0.564	240		0.995
60		0.580	250	maximum	1.000
70	lobe	0.586	260		0.995
80		0.580	270		0.980
90		0.564	280		0.954
100		0.542	290		0.918
110		0.519	300		0.872
120		0.505	310		0.817
124	minimum	0.503	320		0.755
130		0.506	330		0.690
140		0.528	340		0.626
150		0.569	350		0.569
160		0.626			
170		0.690			

# Table 2 INTERFERENCE ANALYSIS RESULTS SUMMARY

prepared for

## TV Alabama, Inc.

WJSU-DT Anniston, Alabama Ch. 9 19 kW (MAX-DA) 359 m

DTV Facilities Stations Considered	Since City, State Channel	Distance (km)	Baseline Population (1)	Calculated "Before" Service Population (2)	Calculated "After" Service Population (3)	Net "New" I ( "2 perce <u>Population</u> (4)		Percentage Reduction of Baseline Population ("10 percent" test) (6)
WALA-DT (Ref 16.5 kW)	Mobile, AL 9	348.8	1,008,000	1,008,437	1,008,437	0	0.00	0.00
WALA-DT (App 124.0 kW)	Mobile, AL	348.8	1,008,000	1,159,149	1,159,149	0	0.00	0.00
WNTV-DT (Ref 5.1 kW)	Greenville, SC	397.6			no interference	e caused by proposal		
WNTV-DT (CP 90.0 kW)	Greenville, SC	397.6			no interference	e caused by proposal	<del></del>	
WXIA-DT (Ref 15.7 kW)	Atlanta, GA 10	194.1			no interference	e caused by proposal		
WXIA-DT (App 80.0 kW)	Atlanta, GA 10	194.1			no interference	e caused by proposal		

Table 2
INTERFERENCE ANALYSIS RESULTS SUMMARY

(page 2 of 3)

# **NTSC Facilities**

Stations Considered	City, State <u>Channel</u>	Distance (km)	Baseline Population	Calculated "Before" Service Population	Calculated "After" Service Population	("2 percent of the pe	Interference ent" test) Percentage	Total Inte from DT ("10 perce <u>Population</u>	CV only ent" test)  Percentage
WAKA(TV) (LIC)	Selma, AL	165.1	680,358	623,362	(3) 623,362	0	0.00	(7)	0.00
WGTV(TV) (LIC)	Athens, GA	211.9			no interference c	aused by proposal			
WTVC(TV) (CP)	Chattanooga, TN	199.8	1,141,965	876,737	859,238	17,499	1.53	24,274	2.13
WTVC(TV) (LIC)	Chattanooga, TN	199.9	1,143,705	878,962	860,835	18,127	1.59	25,179	2.20
WTVM(TV) (LIC)	Columbus, GA	209.0	1,004,608	724,727	715,560	9,167	0.91	11,587	1.15
WTVA(TV) (LIC)	Tupelo, MS	248.4	684,478	618,255	607,955	10,300	1.50	10,475	1.53
WBIQ(TV) (LIC)	Birmingham, AL	37.8	1,585,126	1,409,687	1,395,841	13,846	0.87	38,698	2.44

# Table 2 INTERFERENCE ANALYSIS RESULTS SUMMARY

(page 3 of 3)

Notes:	(1)	For DTV stations, greater of NTSC or DTV Service Population, from FCC Table
		For NTSC stations, total population within noise-limited contour
	(2)	Service population after reduction from terrain and interference losses, before consideration of proposal
	(3)	Service population after reduction from terrain and interference losses, considering proposal
	(4)	Net change in population receiving interference resulting from proposal, equals (2) minus (3). A negative number indicates a <i>reduction</i> in interference.
	(5)	Proposal's impact in terms of percentage, equals (4)/(1) times 100 percent: not to exceed de minimis limit of 2.0 percent
	(6)	Total interference to DTV stations: equals 100 percent minus [(3)/(1) X 100%]; proposal may not add interference above 10% total. Zero total interference is indicated if (3) is greater than (1).
	(7)	NTSC station total population subject to interference from DTV only sources (considering proposal)
	(8)	Proposal's impact to NTSC station in terms of percentage, equals (7)/(1) times 100 percent; proposal may not add interference above 10% total

The determination of stations for consideration and the determination of baseline population and interference percentages were made as described in the Commission's August 10, 1998 Public Notice "Additional Application Processing Guidelines for Digital Television"